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on APRIL 23, 2004

Date of Deposit

John Murray

Name of applicant, assignee or  
Registered Representative

John Murray

Signature

APRIL 23, 2004

Date of Signature

Case No. 11472/11

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

Tapas K. Das Gupta *et al.*

Serial No.: 10/720,603

Filing Date: November 24, 2003

For: Cytotoxic Factors For Modulating  
Cell Death

Examiner: Not assigned

Group Art Unit No.: 1642

**REQUEST FOR A CORRECTED FILING RECEIPT**

COMMISSIONER FOR PATENTS  
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Attention: Application Processing Division  
Customer Correction Branch

Sir:

Enclosed herewith is a copy of the Official Filing Receipt for the above-identified patent application marked in red indicating corrections to be made thereto. Applicants request that the USPTO issue a corrected Filing Receipt reflecting these corrections.

Applicants request correction of the name of the inventor Tapas K. Das Gupta. Applicants also request correction of the domestic priority claimed to indicate that priority is claimed to provisional patent application 60/414,550, filed 8/15/03.

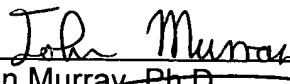
The USPTO had not assigned a serial number for provisional application 60/414,550 at the time of filing of the present application. Therefore, Applicants identified this application by its Attorney Reference Number (11472/5) in the first paragraph of the specification. A copy of this paragraph is enclosed. Applicants have submitted a Preliminary Amendment for the present application requesting that this paragraph be amended to include the serial number assigned to the provisional application.

Applicants also submit a "Decision Granting Petition", issued for Attorney Reference Number 11472/5, stating that this application has been assigned provisional application serial number 60/414,550 and a filing date of August 15, 2003.

The Commissioner is hereby authorized to charge any fees required to Deposit Account No. 23-1925. A duplicate copy of this sheet is enclosed. If, for any reason, an interview would be helpful to resolve any issues, please contact the undersigned attorney at (312) 321-4229.

Respectfully submitted,

Dated: April 23, 2004

  
John Murray, Ph.D.  
Registration No. 44,251  
Attorney for Applicants

BRINKS HOFER GILSON & LIONE  
P.O. BOX 10395  
CHICAGO, ILLINOIS 60610  
Telephone: (312) 321-4229



TRANSMITTAL LETTER			Case No. 11472/11
Serial No. 10/721,603	Filing Date November 24, 2003	Examiner NA	Group Art Unit 1642
Inventor(s) Das K. Das Gupta et al.			
Title of Invention Cytotoxic Factors For Modulating Cell Death			

TO THE COMMISSIONER FOR PATENTS

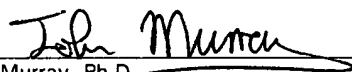
Transmitted herewith is Request for a Corrected Filing Receipt, copy of filing receipt, copy of Decision Granting Petition and return postcard.

- ☐ Small entity status of this application under 37 CFR § 1.27 has been established by verified statement previously submitted.
- ☐ Applicant claims small entity status. See 37 CFR 1.27.
- ☐ Petition for a \_\_\_\_\_ month extension of time.
- ☒ No additional fee is required.
- ☐ The fee has been calculated as shown below:

					Small Entity		or	Other Than Small Entity	
	Claims Remaining After Amendment		Highest No. Previously Paid For	Present Extra	Rate	Add'l Fee		Rate	Add'l Fee
Total		Minus			x \$9 =			x \$18 =	
Indep.		Minus			x 43 =			x \$86 =	
First Presentation of Multiple Dep. Claim					+ \$145 =			+ \$290 =	
					Total add'l fee	\$		Total add'l fee	\$

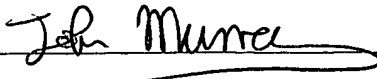
- ☐ Please charge Deposit Account No. 23-1925 (BRINKS HOFER GILSON & LIONE) in the amount of \$\_\_\_\_. A duplicate copy of this sheet is enclosed.
- ☐ A check in the amount of \$\_\_\_\_ to cover the filing fee is enclosed.
- ☒ The Commissioner is hereby authorized to charge payment of any additional filing fees required under 37 CFR § 1.16 and any patent application processing fees under 37 CFR § 1.17 associated with this communication or credit any overpayment to Deposit Account No. 23-1925. A duplicate copy of this sheet is enclosed.
- ☒ I hereby petition under 37 CFR § 1.136(a) for any extension of time required to ensure that this paper is timely filed. Please charge any associated fees which have not otherwise been paid to Deposit Account No. 23-1925. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

  
John Murray, Ph.D.  
Registration No. 44,251  
Attorney for Applicant  
Customer No. 00757 - Brinks Hofer Gilson Lione

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Date: April 23, 2004 Signature: 

# CYTOTOXIC FACTORS FOR MODULATING CELL DEATH

## RELATED APPLICATIONS

[001] This application claims priority to U.S. Provisional Patent Application Attorney Reference Number 11472/5, filed August 15, 2003, and is a continuation-in-part of U.S. Patent Application Serial Number 10/047,710, filed January 15, 2002, which claims priority to U.S. Provisional Patent Application Serial Number 60/269,133, filed February 15<sup>th</sup>, 2001. The entire content of these prior applications is fully incorporated herein by this reference.

## STATEMENT OF GOVERNMENTAL INTEREST

[002] The subject matter of this application has been supported by research grants from the National Institutes of Health (NIH), Bethesda, Maryland, U.S.A., (Grant Numbers AI 16790-21, ES 04050-16, AI 45541, CA09432 and N01-CM97567). The government may have certain rights in this invention.

## FIELD OF THE INVENTION

[003] The present invention relates to cytotoxic factors secreted by microorganisms and inhibitors of cytotoxic factors and their use in causing cellular growth arrest and in modulating cell death by necrosis and apoptosis. The present invention also relates to methods of producing, isolating and identifying such cytotoxic factors and to compositions incorporating substantially pure cytotoxic factors useful in modulating cell death and causing cellular growth arrest. The invention also relates to methods of treating apoptosis-related conditions. More particularly, the invention relates to the use of a substantially pure cytotoxic factor in a method of inducing apoptosis or cellular growth arrest in a cancer cell and to the use of inhibitors of the cytotoxic factors for treating an infection or other pathogen-induced condition.

## BACKGROUND

[004] Infectious diseases can be a product of a number of environmental factors. Underlying any infectious disease is a causative infectious agent. The infectious



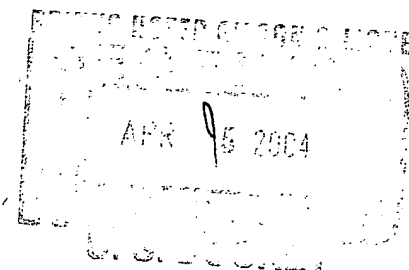
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10/720,603	11/24/2003	1642	394	11472/11	15	21	2

00757

GENERAL NUMBER 00757  
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 P.O. BOX 10395  
 CHICAGO, IL 60611



CONFIRMATION NO. 6398

## FILING RECEIPT



\*OC000000012225123\*

Date Mailed: 03/30/2004

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections, facsimile number 703-746-9195. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

## Applicant(s)

Ananda M. Chakrabarty, Villa Park, IL;  
 Tapas K. Gupta, River Forest, IL;  
 Vasu Punj, Chicago, IL;  
 Olga Zaborina, Brookfield, IL;  
 Yoshinori Hiraoka, Residence Not Provided;  
 Tohru Yamada, Residence Not Provided;

DAS

## Domestic Priority data as claimed by applicant

This application is a CIP of 10/047,710 01/15/2002  
 which claims benefit of 60/269,133 02/15/2001

Foreign Applications **CLAIMS BENEFIT OF 60/414,550 8/15/2003 AND**

If Required, Foreign Filing License Granted: 03/29/2004

Projected Publication Date: To Be Determined - pending completion of Missing Parts

Non-Publication Request: No

Early Publication Request: No

\*\* SMALL ENTITY \*\*



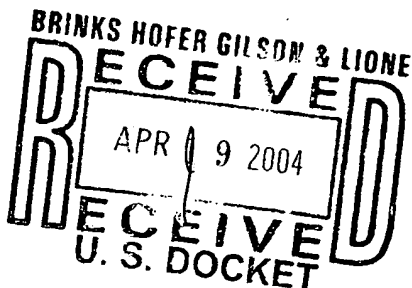
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JOHN MURRAY  
BRINKS, HOFER, GILSON & LIONE  
P.O. BOX 10395  
CHICAGO IL 60610



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APR 13 2004

OFFICE OF PETITIONS

In re Application of  
Das Gupta et al.

Application No. 60/414,550

Filed: 15 August, 2003

Attorney Docket No. 11472/5

:  
:  
: DECISION GRANTING PETITION  
:  
:

This is a decision on the petition under 37 CFR 1.10(e)<sup>1</sup> filed on 1 April, 2004, requesting that the above-identified provisional application be accorded a filing date of 15 August, 2003.

Petitioners allege that the application was deposited in "Express

<sup>1</sup> 37 CFR 1.10(e) provides that:

Any person mailing correspondence properly addressed to the Office with sufficient postage utilizing "Express Mail Post Office to Addressee" service of the USPS but not received by the Office, may petition the Commissioner to consider such correspondence filed in the Office on the USPS deposit date, provided that:

(1) The petition is filed promptly after the person becomes aware that the Office has no evidence of receipt of the correspondence;

(2) The number of the "Express Mail" mailing label was placed on the paper(s) or fee(s) that constitute the correspondence prior to the original mailing by "Express Mail";

(3) The petition includes a copy of the originally deposited paper(s) or fee(s) that constitute the correspondence showing the number of the "Express Mail" mailing label thereon, a copy of any returned postcard receipt, a copy of the "Express Mail" mailing label showing the "date-in," a copy of any other official notation by the USPS relied upon to show the date of deposit, and, if the requested filing date is a date other than the "date-in" on the "Express Mail" mailing label or other official notation entered by the USPS, a showing pursuant to paragraph (d)(3) of this section that the requested filing date was the date the correspondence was deposited in the "Express Mail Post Office to Addressee" service prior to the last scheduled pickup for that day; and

(4) The petition includes a statement which establishes, to the satisfaction of the Commissioner, the original deposit of the correspondence and that the copies of the correspondence, the copy of the "Express Mail" mailing label, the copy of any returned postcard receipt, and any official notation entered by the USPS are true copies of the originally mailed correspondence, original "Express Mail" mailing label, returned postcard receipt, and official notation entered by the USPS.



Mail" service with the U.S. Postal Service on 15 August, 2003. In support, petitioner provided a copy of the Express Mail Customer Label No. EL835293006US, showing a Date-in of "8-15-03". The same Express Mail receipt number was referred to on the itemized Provisional Application Transmittal sheet submitted with the present petition. Petitioners have provided a copy of 59 pages of specification (including one (1) page of abstract and one title page), and 15 sheets of drawings.

The Office considers the date the paper or fee is shown to have been deposited as "Express Mail" to be the "Date In" on the Express Mail label.<sup>2</sup> That is the date that verifies that the package was actually mailed. In view of the above, the evidence is convincing that the application was deposited as "Express Mail" with the USPS on 15 August, 2003.

In view of the above, the petition is granted. No petition fee is due and none has been charged.

The application will be processed with a filing date of 15 August, 2003, using the copies of the application papers supplied with the present petition.

The application is being forwarded to the Office of Initial Patent Examination for further processing with a filing date of 15 August, 2003, using the application papers supplied with the present petition.

Telephone inquiries specific to this matter should be directed to the undersigned at 703 308-6918.



Douglas I. Wood  
Senior Petitions Attorney  
Office of Petitions

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<sup>2</sup> MPEP 513.